

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____				
Misidentified ☐	☐	Past Due ☐					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
2AD 21 25-7																									
Root Cause		FAULT CATEGORY																							
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐		Power Loss/Surge ☐		Positioned Wrong ☐															
Design ☐		Operator ☐		Bending ☐		Set-up ☐		Folio/Program ☐		Outside Dimensions ☐															
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐		Grain ☐		Over/Under tolerance ☐															
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Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐		Wrong Stock Pulled ☐		Part Lost/Missing ☐															
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Past Expiry Date ☐		Manufacturing Process ☐																							
Misidentified ☐		Past Due ☐																							
				OTHER :																					

Work Order ID 153891***153891***

Page 3

Monday, November 28, 2016 12:45:04 PM

Item ID: D4880-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Strut
Start Date: 11/29/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 12/6/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.01				1			DAS 38 9-89 JAN 19 2017
160 *160* Packaging Packaging	Identify as per dwg & Stock Location: <u>8T/33</u> Memo	0.00 0.01				IX			DAS 26 9-89 JAN 19 2017
170 *170* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.07							17/01/23 JF DAS 21 9-89 JAN 20 2017

Picklist Print

Monday, November 28, 2016 12:45:10 PM

Page 1

Work Order ID: 153891

153891

Parent Item: D4880-1

D4880-1

Parent Item Name: Strut

Start Date: 11/29/2016

Required Date: 12/6/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 13.12.17 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174PH-H900R0.750		Purchased	No				f	12.0000		3.2			
M174PH-H900R0 750									**				
17-4 SS H900 ROUND BAR 0.750"													

Location

Loc Qty

Loc Code

MAT031

12

M136221

12

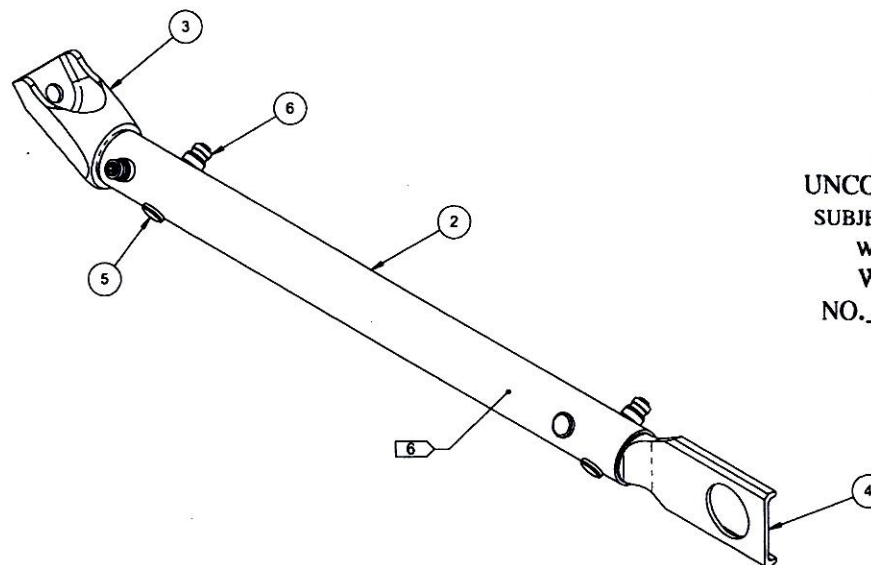
5.542 *10-12-01*

M174PH-H900R0.750

M136221

38 3/4
48 - 9 1/4
27 3/4
48 - 20 1/4
60 1/2

ITEM	QTY. -041	P/N	DESCRIPTION
1	X	D4880-041	FWD LEG ASSEMBLY, LH
2	1	D4880-1	STRUT
3	1	D4883-7	END FITTING
4	1	D4884-1	END FITTING, EYE
5	4	HL32PB5-12	HI-LOK PIN
6	4	HL86-5	HI-LOK COLLAR



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153871

VLL
14/12/26

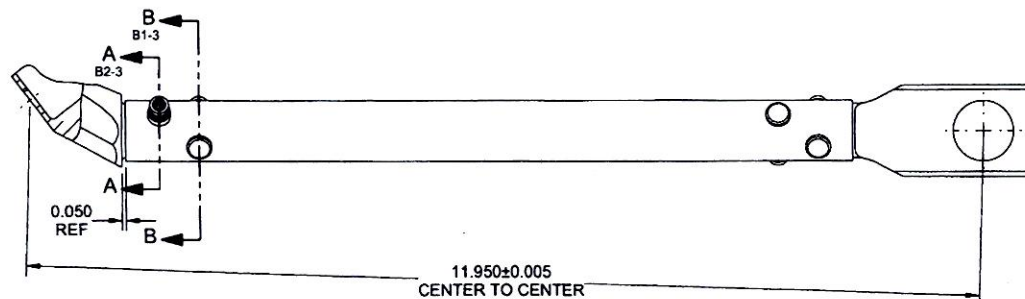
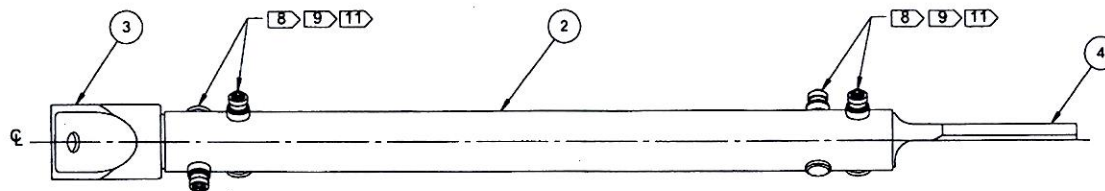
D4880-041 FWD LEG ASSEMBLY, LH
(EQUIVALENT TO BELL P/N 206-062-101-101)

NOTES:

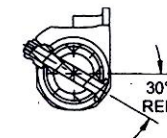
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.8
- 7) WEIGHT: 0.69 lbs
- 8) ALIGN PILOT HOLES IN D4880-1 WITH PILOT HOLES IN D4883-7 & D4884-1.
DRILL OUT EACH HOLE USING A P/N 13-SB65 (0.125) PILOTED DRILL.
REAM EACH HOLE USING P/N 31-219 (Ø0.1610) REAMER, USING DART TOOL SETUP DT9971
- 9) INSTALL PIN/COLLAR AND END FITTING WITH HYSOL EA934NA OR MAGNOBOND 6398 ADHESIVE WHILE STILL WET
- 10) ASSEMBLE PER DART TOOL DT9971
- 11) INSTALL HL32PB5-12 HI-LOK IN ORIENTATION SHOWN

C	HL32PB5-12 WAS HL20PB5-12 (ZN D4-1, D4-3); REVISE NOTE 6) (ZN A8-5); ADD "FWD" (ZN B4-1, B4-2, B4-3, B4-4)	RF	14.06.24
B	REVISE NOTES 6), 7) & 9) (ZN A8-1, A8-3); ADDED BELL P/N	RF	14.04.08
A	NEW ISSUE	RF	13.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	HS	DRAWING NO.	REV. C
MFG. APPR.	JLM	D4880	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LEG ASSEMBLY	NTS
DATE	14.06.24	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

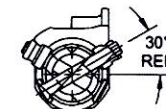
APPROVED



D4880-041 FWD LEG ASSEMBLY, LH
AUXILIARY VIEW



SECTION A-A C7-3
2 PL, SIMILAR

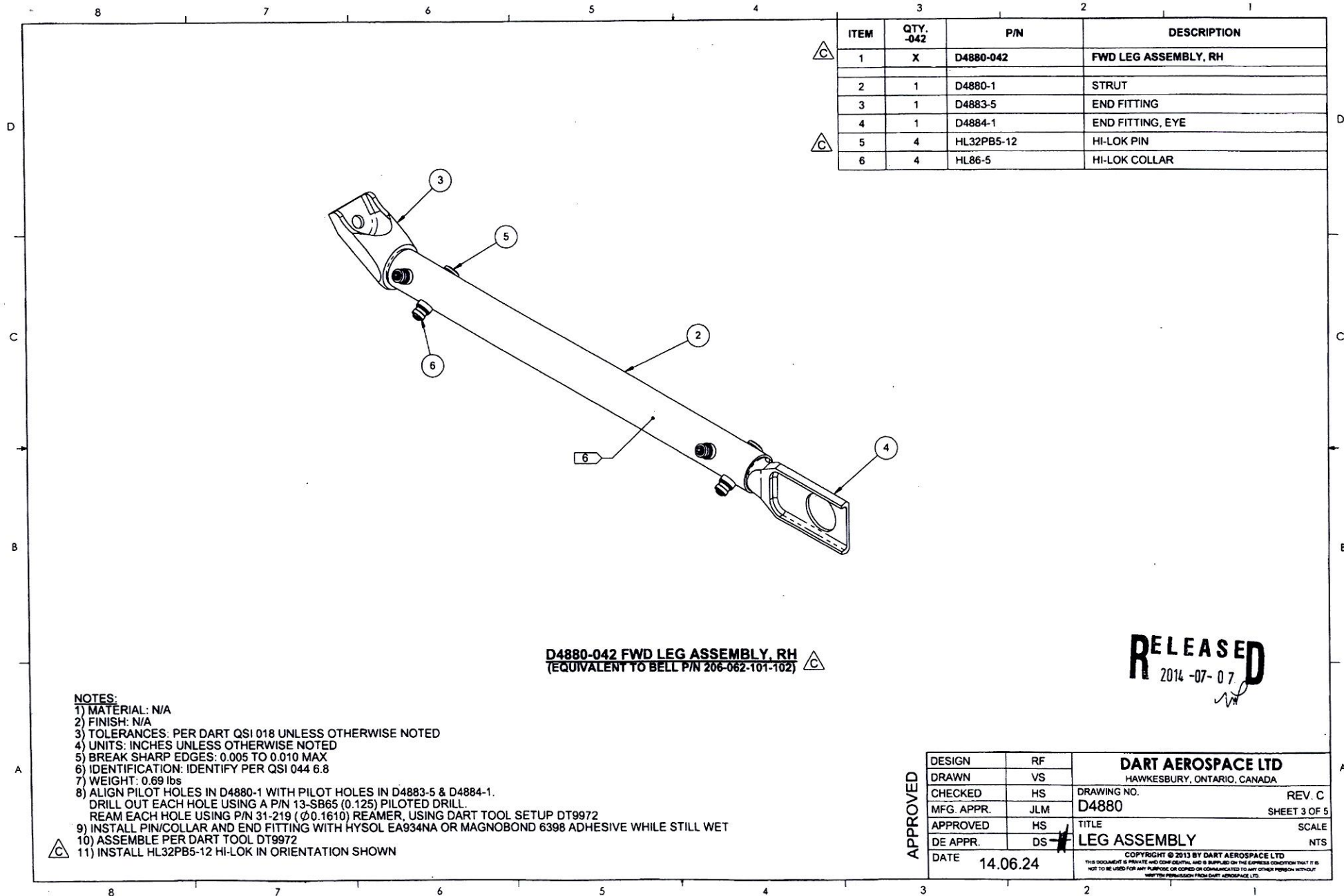


SECTION B-B C7-3
2 PL

RELEASED
2014-07-07
MP

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	HS	DRAWING NO.	REV. C
MFG. APPR.	JLM	D4880	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LEG ASSEMBLY	NTS
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ITEM	QTY. -042	P/N	DESCRIPTION
1	X	D4880-042	FWD LEG ASSEMBLY, RH
2	1	D4880-1	STRUT
3	1	D4883-5	END FITTING
4	1	D4884-1	END FITTING, EYE
5	4	HL32PB5-12	HI-LOK PIN
6	4	HL86-5	HI-LOK COLLAR

D4880-042 FWD LEG ASSEMBLY, RH
(EQUIVALENT TO BELL P/N 206-062-101-102)

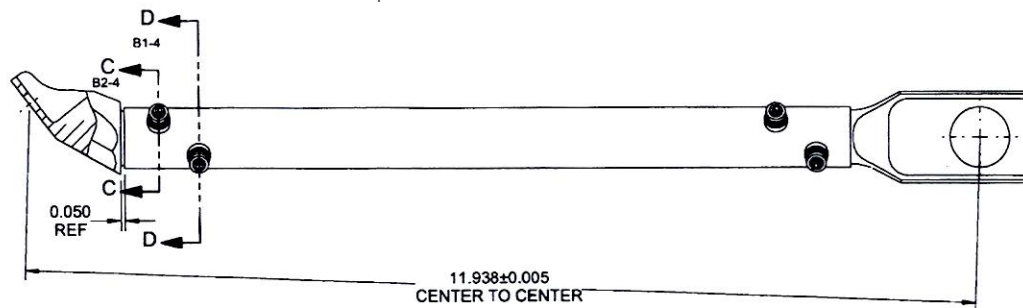
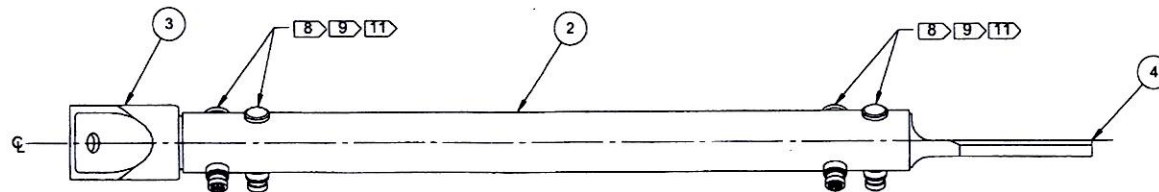
RELEASED
2014-07-07

NOTES:

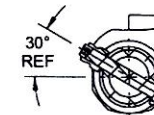
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
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- 7) WEIGHT: 0.69 lbs
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DRILL OUT EACH HOLE USING A P/N 13-SB65 (0.125) PILOTED DRILL.
REAM EACH HOLE USING P/N 31-219 (Ø0.1610) REAMER, USING DART TOOL SETUP DT9972
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- 10) ASSEMBLE PER DART TOOL DT9972
- 11) INSTALL HL32PB5-12 HI-LOK IN ORIENTATION SHOWN

APPROVED

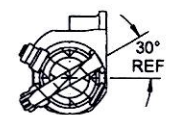
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	HS	DRAWING NO. D4880	REV. C
MFG. APPR.	JLM	SHEET 3 OF 5	
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	LEG ASSEMBLY	NTS
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D4880-042 FWD LEG ASSEMBLY, RH
AUXILIARY VIEW



SECTION C-C C7-4
2 PL



SECTION D-D C7-4
2 PL

RELEASED
2014-07-07

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	VS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	HS	DRAWING NO. D4880	REV. C
MFG. APPR.	JLM	SHEET 4 OF 5	
APPROVED	HS	TITLE	SCALE
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35021**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 3 of 3

Order From :
SKYSERVICE
6120 MIDFIELD ROAD
MISSISSAUGA, ONTARIO L5P 1B1
CANADA

VC-SKY001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905-678-5636

Ship To Contact
Ship To Phone
Ship Via: Delivered
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

Line Total: **\$200.00**

6 153891 **DAS 38 9-89** D4880-1 STRUT 1/19/2017 Yes 1/19/2017

1.00

\$35.00 \$35.00

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR
LPI AS PER ASTM 1417 LEVEL 2

Line Total: **\$35.00**

PO Total: **\$835.00**

SP17-01-19

CL

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 1/19/2017



skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO30772	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO35021
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON 4 CROSSTUBES AND 1 STRUT AS PER PO35021

1 STRUT , ITEM ID# D4880-1 , WORK ORDER ID# 153891

SP17-01-19.

4 AFT CROSSTUBES , ITEM ID# D412-664-203 , WORK ORDERS ID# 152664, 152665, 153384, 153385

Action Taken:						Date:	Initial/Stamp:
LPI C/O IAW ASTM E-1417M-13 ***NO CRACK FOUND*** PEN. ZL-56, MPO13600, CLEANER SKC-S MPO13923 , EMU. MPO15896, DEV. MPO11715 , UV LIGHT M-20142						JAN 19 2017	
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	
	DAC						
	38						
	9-89						
	JAN 19 2017						

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp	Date:
Name: RAFIK MELIKIAN		JAN 19 2017